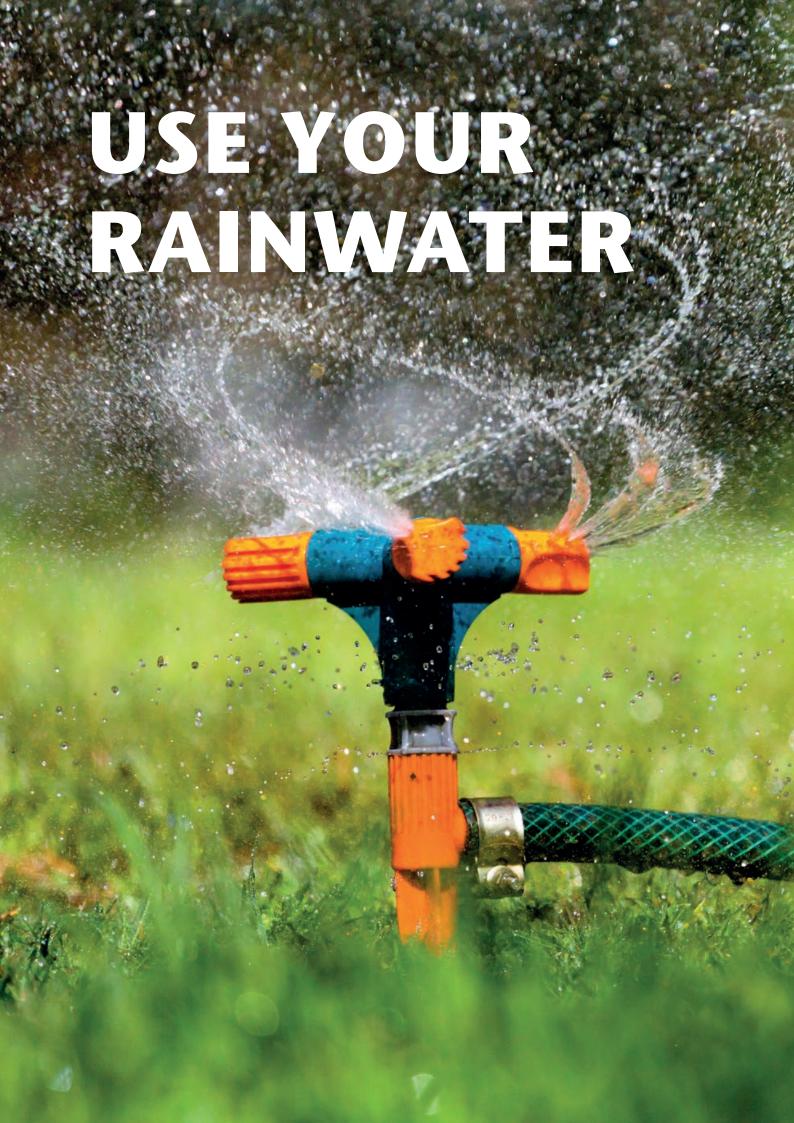


Use your rainwater

ACO Rain4me rainwater harvesting

2018







#### Do something to save water!

If the environment is important to you, you should use the precious resource water responsibly.

For a start, you can reduce your personal water consumption by changing your habits; however, you could also use rainwater instead of drinking water to meet some of your water needs.

# Do you flush your toilet with mains water?

Clean water is a valuable commodity. Globally, fifteen times more groundwater is used than new groundwater is produced. The groundwater level is therefore constantly becoming lower.

On the other hand, heavy rains create a staggering surplus of water for short periods. Harvest and store the rainwater that falls in your garden and use it when you need it.

Up to fifty per cent of drinking water could be saved by using rainwater! Make the valuable resource water – and your money – go further!

### Potential water consumption reduction through rainwater harvesting

2% of cleaning water

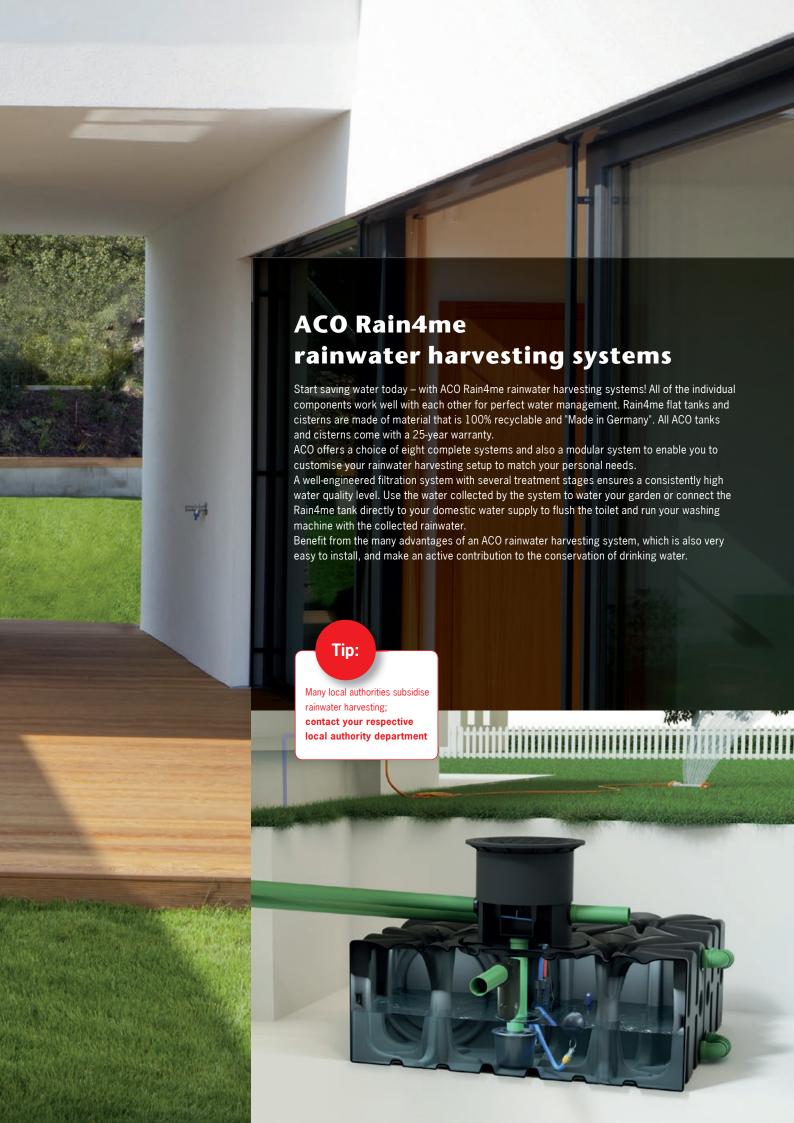
5% of the water used to water the garden

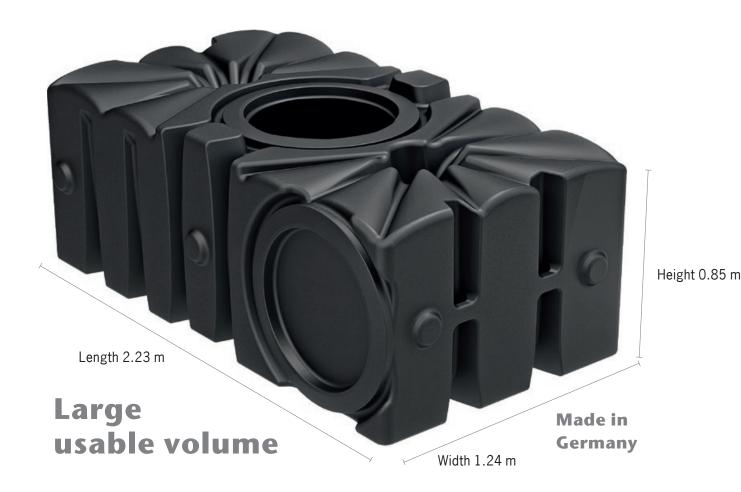
13% of the water used to do the laundry

**30%** of the water used to flush the toilet

= approx. 50%
that could be replaced







#### Rain4me flat tank

ACO Rain4me flat tanks are designed to be installed underground and can be arranged as needed depending on the size of your garden. Due to their flat shape, they call for much less excavation work than cylindrical cisterns. This saves you time and money. By combining several different rainwater tanks, you can adapt the system volume perfectly to meet your personal requirements and take the space available to you for installation into account. Our system is also designed in a way that makes it possible to increase the system volume at any time at a later date. Due to its minimal depth of only 85 centimetres, the tanks

fit easily through any standard front door or garden gate. The entire tank is made of solid, fully-recyclable PE-LLD. All of our products are 'Made in Germany', where the tank statics were also tested and approved. Choose this durable product and you can rest assured that you have found a solution that is sustainable either way – regardless of whether you decide to opt for one of our eight complete system solutions or a modular system.

- Black plastic (PE-LLD)
- Wall thickness: approx. 8 mm
- Gross volume: 2,000 litres
- Net weight: 105 kg

#### Benefits

- Minimal excavation work
- Can be installed in driveways
- Easy to transport (modular system)



25year Warranty\*

\*We provide a 25-year intactness warranty on each underground tank (no deformation, no leaking). Warranty conditions: The tank must be installed in accordance with our installation conditions, in particular with respect to the substructure and statics, and it must be used and handled

correctly. In the event of a warranty claim, we will replace and supply the materials used free of charge. Any warranty services above and beyond are excluded. The above does not apply to any defect liability claims.



The flat tank is easy to transport and fits through any standard door

#### Design your flat tank

### System design

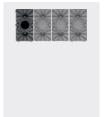
### Tip:

Use the ACO online configurator to calculate the volume you need for your plot!

www.rain4me.aco

#### Arrangement on your plot

#### horizontally





Excavation depth:

approx. 1.25 m (garden)

approx. 1.45 m (house and garden)

#### vertically





Excavation depth:

approx. 1.84 m (garden)

approx. 1.84 m (house and garden)

#### For underground installation

#### Rain4me cisterns

ACO Rain4me cisterns are available in three sizes: 3,300 I, 4,700 I and 6,500 I. Due to their special shape and outstanding stability, they are groundwater-stable and frost-resistant. These cisterns can even be installed in groundwater and therefore also work during the winter months. The tanks are made of high-quality polyethylene. Special reinforcement ribs guarantee maximum structural stability; cars can therefore be driven over the cistern once it has been installed underground.

- Black plastic (PE-LLD)
- Wall thickness: approx. 8 mm
- Underground tank volumes: 3,300 I/4,700I/6,500 I
- Additional alternative to a flat tank
- Complete systems Garden Basic, Garden Plus, House and Garden Compact, House and Garden Professional
- All complete system components are also available separately

#### **Benefits**

- Frost-resistant installation
- Groundwater-stable (if installed according to instructions)





tension and therefore have a particularly long lifespan.

- 350, 500, 1,000, 4,000 I tank size
- Free-standing indoor installation







#### **Built-in tank filter**

A built-in tank filter is permanently integrated into the top section. It has a very high efficiency level of ninety-five per cent; all rainwater is therefore cleaned extremely effectively.

The rainwater flows across the blue filter insert. Leaves and similar dirt and debris are filtered off. Only five per cent of the collected rainwater is fed into the sewage system. This process not only cleans the rainwater but also ensures that the filter is self-cleaning. A calmed inlet can also be fitted.



#### Filter basket

The filter basket is an alternative to a gutter guard that is incredibly easy to install. The basket sits inside the top section. The rainwater flows through the filter basket, which acts as a sieve. Dirt and debris such as leaves are retained in the basket. The filter basket can then simply be taken out of the top section for cleaning. It cannot be connected to a calmed inlet as the water flows directly from the filter basket into the tank.





#### **Built-in filter basket**

Our built-in filter basket is a further development of the filter basket system. The basket is covered by a plastic outer and is permanently integrated into the top section. The plastic outer makes it possible to fit a calmed inlet. Fitting a built-in filter basket results in a water yield of one hundred per cent. This filter option is therefore particularly suitable for smaller roof surfaces. The basket can be removed separately for cleaning. Up to four DN 100 inlets can be connected to a built-in filter basket.



#### Water standpipe

made of high-quality granite look plastic with a chrome water tap for rainwater withdrawal, height: 98 cm



#### Water supply box

for flush installation at ground level with two stainless steel quick release couplings for garden hose connection The state of the s

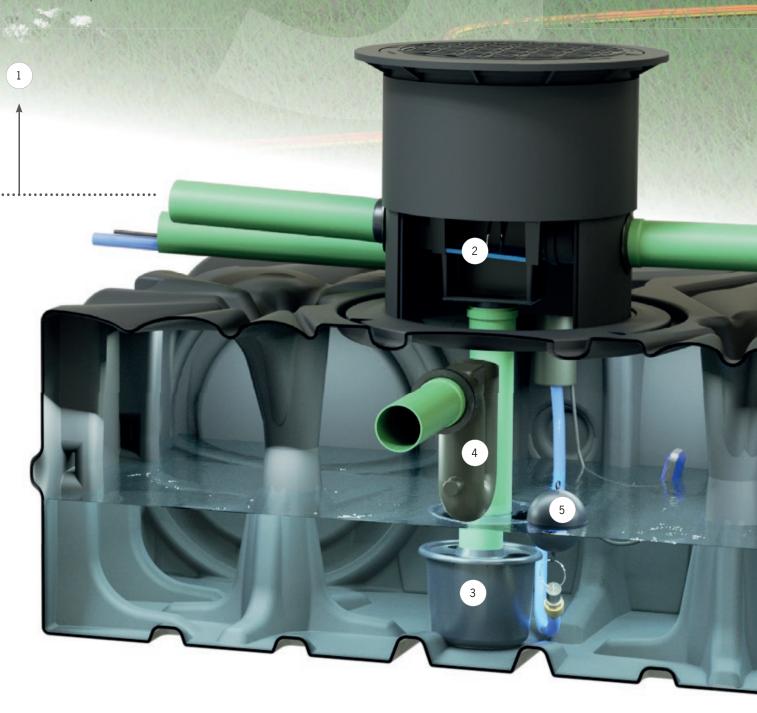
MACHEN !



**Excellent water quality thanks to ACO's expertise** 

Use rainwater to clean the house? Or even for the laundry? Anyone who has ever cleaned windows knows that rainwater is dirty. This dirt comes from the air and from the surfaces the water flows over.

Rainwater must therefore be treated if it is to be used in the household. However, even if the rainwater is only used for flushing the toilet or watering the garden, it needs to be cleaned first to prevent it from smelling unpleasantly due to organic constituents such as plant residues.











# GARDEN

### Using rainwater → Watering your garden

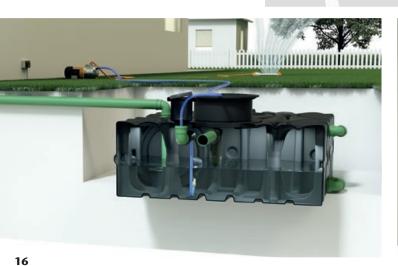


The most important decision you have to make is whether you want to harvest rainwater only for use in the garden or whether you would also like to use it inside the home.

ACO offers four complete systems for use in the garden: a simple solution and a

more complex system, both of which are available in a flat tank or a cistern version. Regardless of which system you opt for, you can rely on the excellent quality of ACO systems and will no longer have to worry about the details. Using rainwater couldn't be any easier!

### **Garden Basic**





Flat tank

Ш

#### Cistern

#### **Complete system Garden Basic**

#### **Entry-level rainwater harvesting system**

Our inexpensive solution 'Garden Basic' is incredibly easy to install. The rainwater is filtered with a gutter guard and then fed through a calmed inlet into the tank. A floating suction unit then feeds the water from there into the water supply box. Above ground, in the garden, the

hose of the jet centrifugal pump is then connected to the box. A garden hose or a sprinkler, for example, can then be connected directly to the pump to water the garden. During the winter months, the pump must be stored in a frost-free environment.

#### Advantages of this complete system

- Calmed inlet and floating withdrawal with integrated filter for optimum water quality
- Convenient water withdrawal via water supply box
- Easy to install



### **Garden Plus**





17

Flat tank Cistern

#### **Complete system Garden Plus**

#### The super convenient solution for your garden

'Garden Plus' is a compact, user-friendly rainwater harvesting system where the pump, which is equipped with a control unit, sits inside the tank. The submersible pump does not need to be removed in the winter. The rainwater, which has been pre-filtered by a gutter guard, flows into

the tank through a downpipe via a calmed inlet. A clean water pressure pump and a floating suction unit feed the water from the tank to a water supply box installed at ground level. The garden hose is then connected to this supply box.

#### Advantages of this complete system

- Calmed inlet and floating withdrawal with integrated filter for optimum water quality
- Convenient water withdrawal via water supply box
- User-friendly as the pump remains in the tank during the winter months





for flat tank and cistern Includes:

**System components** 



20 m gutter guard



Jet centrifugal pump (for external installation)

- 3 Tank (flat tank/cistern)
- 4 Walkable top section
- 5 Water supply box

#### Complete system with choice of tank models



- The dimensions stated (length x width x height) are the product dimensions including the walkable top section without any further allowances
- Maximum groundwater level of 40 cm applies for walkable versions













#### Complete system with choice of tank models



Each with walkable top section (600-695 mm)



■ The dimensions stated (length x width x height) are the product dimensions including the load-bearing top section without any further allowances



System components for flat tank and cistern Includes:



20 m gutter guard



Clean water pressure pump inside the tank

- 3 Tank (flat tank/cistern)
- 4 Walkable top section
- 5 Water supply box

#### Complete system with choice of tank models



- The dimensions stated (length x width x height) are the product dimensions including the walkable top section without any further allowances
- Maximum groundwater level of 40 cm applies for walkable versions











Overflow syphon



#### Complete system with choice of tank models



Each with walkable top section (600-695 mm)



■ The dimensions stated (length x width x height) are the product dimensions including the load-bearing top section without any further allowances



# HOUSE AND GARDEN

#### **ACO Rain4me complete systems**

ACO has put together four complete systems for harvesting rainwater for your garden and also for domestic rainwater use, a simple solution and a more complex one. Each is available with either a flat tank or a cistern. Regardless of which system you opt for, you can rely on the excellent quality of ACO systems and no longer have to worry about the details. Harvesting rainwater couldn't be any easier!

### **House and Garden Compact**





Flat tank C

#### **Complete system House and Garden Compact**

#### Rainwater harvesting made easy

The easy-to-install complete system 'House and Garden Compact' consists of a gutter guard that pre-cleans the rainwater and an additional filter inside the top section that cleans the water before it flows through a calmed inlet into the tank. From there, a floating suction filter feeds the water to the various supply points inside the home and to an outside water tap via a separate pipe system.

When the tank is empty, a control unit installed inside the house ensures that it is automatically refilled with tap water. It is therefore still possible to use the washing machine etc. in periods with little rainfall. As soon as it rains and the tank is refilled with rainwater, the control unit automatically stops any drinking water from flowing into the tank.

Benefit: No pumping noises inside the house.

#### Advantages of this complete system

- Calmed inlet and floating withdrawal with integrated filter for optimum water quality
- Smart pre-filtering system with gutter guard and self-cleaning filter inside the dome
- Pump inside the tank: no pumping noises in the house

Using rainwater —

Toilet flushing
Washing machine
Cleaning
Watering your garden

### **House and Garden Professional**





Flat tank

Cistern

### **Complete system House and Garden Professional**

#### Perfectly integrated rainwater harvesting

A small storage tank inside the house ensures that the professional solution offers an optimised drinking water refilling process. The Compact system's pump is located inside the rainwater tank, whereas the Professional solution's pump is integrated into the control unit inside the house. It switches to drinking water as soon as the garden tank is empty.

However, the drinking water is not first pumped outside into the tank but supplied directly to the supply points from a storage tank located inside the house. This tank is refilled automatically. The control unit automatically switches back to rainwater as soon as it is available again.

#### Advantages of this complete system

- Calmed inlet and floating withdrawal with integrated filter for optimum water quality
- Smart pre-filtering system with gutter guard and self-cleaning filter inside the dome
- Needs-based refilling of empty tank with drinking water



System components for flat tank and cistern Includes:



20 m gutter guard



Built-in tank filter inside the telescopic dome



Clean water pressure pump inside the tank

- 4 Tank (flat tank/cistern)
- 5 Walkable top section

#### Complete system with choice of tank models



- The dimensions stated (length x width x height) are the product dimensions including the walkable top section without any further allowances
- Maximum groundwater level of 40 cm applies for walkable versions











Fully-automated rainwater management system

#### Complete system with choice of tank models



Each with walkable top section (600-695 mm)



■ The dimensions stated (length x width x height) are the product dimensions including the load-bearing top section without any further allowances



System components for flat tank and cistern Includes:



20 m gutter guard



Built-in tank filter inside the telescopic dome

3 Tank (flat tank/cistern)

Walkable top section

4

#### Complete system with choice of tank models



- The dimensions stated (length x width x height) are the product dimensions including the walkable top section without any further allowances
- Maximum groundwater level of 40 cm applies for walkable versions







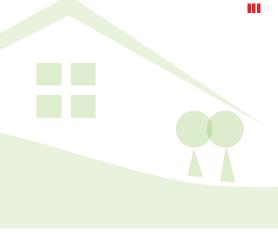




Complete system with choice of tank models



Each with walkable top section (600-695 mm)



27

■ The dimensions stated (length x width x height) are the product dimensions including the load-bearing top section without any further allowances

1

### **Choose your tank**

#### Flat tank horizontal\*



4.0001

2.23 x 1.24 x 0.85 m **Product no.** 103001

2.23 x 2.48 x 0.85 m

2.23 x 3.72 x 0.85 m

Product no.

Product no.

103002

- Minimal excavation work
- Can be installed in driveways4,000 I = 2 x 2,000 I
- 4,000 I = 2 x 2,000 I 6,000 I = 3 x 2,000 I 8,000 I = 4 x 2,000 I
- Easy to transport (modular system)



103003 2.23 x 4.96 x 0.85 m **Product no.** 

103004



4.46 x 1.24 x 0.85 m **Product no.** 103022

6.69 x 1.24 x 0.85 m **Product no.** 103023

8.92 x 1.24 x 0.85 m **Product no.** 103024

2.23 x 0.85 x 1.24 m

Product no.

103000

### Flat tank vertical\*



- for smaller gardens 4,000 I = 2 x 2,000 I 6,000 I = 3 x 2,000 I
- 8,000 I = 4 x 2,000 I

  Easy to transport
- Easy to transport (modular system)



2.23 x 1.70 x 1.24 m **Product no.** 103032



2.23 x 2.55 x 1.24 m **Product no.** 103033



2.23 x 3.40 x 1.24 m **Product no.** 103034



4.46 x 0.85 x 1.24 m **Product no.** 103042

6.69 x 0.85 x 1.24 m **Product no.** 103043

8.92 x 0.85 x 1.24 m **Product no.** 103044

#### Cistern\*

- Frost-resistant installation
- Groundwater-stable
  Can be installed in
- Can be installed in driveways



2.30 x 1.40 x1.49 m **Product no.** 103760



2.30 x 1.80 x 1.86 m **Product no.** 103761



2.30 x 2.10 x 2.05 m **Product no.** 103762

# 2

### Choose a top section and

### Top section with gutter guard only

 Suitable for horizontally/vertically installed flat tanks and cisterns



- Walkable cover, load-bearing up to 200 kg (Ø 60 cm)
- With high plastic telescopic dome shaft
- Height adjustable (600 695 mm)

■ With 20 m gutter guard

Product no. 103101

■ Suitable forhorizontally installed flat tanks and cisterns



- **Driveablecover**, load-bearing up to a maximum of 3.5 t vehicle weight, 2.2 t axle load (Ø 60 cm)
- With high plastic telescopic dome shaft
- Height adjustable (600 695 mm)



■ With 20 m gutter guard

Product no. 103102

■ Suitable for horizontally installed flat tank





- Walkable cover (Ø 60 cm), load-bearing up to 200 kg
- With standard telescopic plastic dome shaft
- Heightadjustable (400 435 mm)

■ With 20 m gutter guard

Product no. 103100

# 3

### **Choose system compone**



#### Calmed inlet

 Odour-neutral water due to oxygen enrichment
 Product no. 103211



#### Overflow syphon

- Skimmereffect, protection against animals
- PE, connection type DN 100

  Product no. 103201

### Top section with filter basket without gutter guard

 Suitable for vertically/horizontally installed flat tanks and cisterns



- Walkable cover, load-bearing up to 200 kg (Ø 60 cm)
- With high plastic telescopic dome shaftHeight adjustable

(600 - 695 mm)

with filter basket (a simple alternative for filtering the water)

Product no. 103106

■ passend für Flachtank liegend und Zisterne





- **Driveablecover,** load-bearing up to a maximum of 3.5 t vehicle weight, 2.2 t axle load (Ø 60 cm)
- With high plastic telescopic dome shaft
- Height adjustable (600 695 mm)

with filter basket (a simple alternative for filtering the water)

Product no. 103107

### Top section with built-in filter basket and gutter guard

■ Suitable for vertically/horizontally installed flat tanks and cisterns







- Walkable cover, load-bearing up to 200 kg (Ø 60 cm)
- With high plastic telescopic dome shaft
- Height adjustable (600 695 mm)
- With high-quality built-in filter basket (suitable for calmed inlet connection)
- maximum of four DN 100 inlets
- with 20 m gutter guard

Product no. 103108

■ Suitable forhorizontally installed flat tanks and cisterns







- Driveablecover,
- load-bearing up to a maximum of 3.5 t vehicle weight, 2.2 t axle load (Ø 60 cm)
- With high plastic telescopic dome shaft
- Height adjustable (600 695 mm)
- With high-quality built-in filter basket (suitable for

calmed inlet con-

nection)
■ maximum of four DN 100 inlets

with 20 m gutter guard

Product no. 103109

nts



#### Overflow syphon

- Skimmereffect and protection against animals
- PE, connection type DN 100 Product no. 103201



#### **Calmed inlet**

 odour-neutral water due to oxygen enrichment
 Product no. 103211



#### Overflow syphon

Skimmereffect, protection against animals

I

■ PE, connection type DN 100 **Product no. 103201** 

### Choose a pump set



#### Clean water pressure pump

- inside the tank
- Convenient solution as the pump can also remain in the tank during the winter months (frost-proof)



■ Floating suction 1 m

Product no. 103151



#### Jet centrifugal pump

- Installation outside of the tank
   Easy to install as no additional power cables needed
- Stainless steel shaft, stainless steel casing, impeller made of wear-resistant plastic



■ Floating suction 5 m

Product no. 103150



#### **Choose a water connection**



- Water supply box
   Practical direct connection of water hoses
- ground level installation

Product no. 103206



#### Water standpipe

■ With tap for easy rainwater withdrawal

Product no. 103215



# ACO Rain4me customised – in five steps

We don't offer a complete system that is perfect for your needs? No problem, simply configure your own Rain4me system with our modular system components. All of the modular components can be combined as required. Wide range of combination options. How to configure your customised rainwater harvesting system:

Chosen

	Choose	components
1	Your tank	
2	A top section and filters	
3	Other system components	
4	A pump set	
5	A water connection type	

### **Choose your tank**

#### Flat tank horizontal\*



4.0001

6.0001

2.23 x 1.24 x 0.85 m Product no. 103001

2.23 x 2.48 x 0.85 m

Product no.

103002

■ Minimal excavation work

Can be installed in driveways ■ 4,000 l = 2 x 2,000 l

 $6,000 I = 3 \times 2,000 I$  $8,000 I = 4 \times 2,000 I$ 

■ Easy to transport (modular system)



2.23 x 3.72 x 0.85 m Product no. 103003

2.23 x 4.96 x 0.85 m Product no. 103004

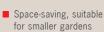


4.46 x 1.24 x 0.85 m Product no. 103022

6.69 x 1.24 x 0.85 m Product no. 103023

8.92 x 1.24 x 0.85 m Product no. 103024

#### Flat tank vertical\*



■ 4,000 l = 2 x 2,000 l  $6,000 I = 3 \times 2,000 I$  $8,000 I = 4 \times 2,000 I$ 

■ Easy to transport (modular system)



2.23 x 1.70 x 1.24 m Product no.

2.23 x 0.85 x 1.24 m

Product no.

103000



2.23 x 2.55 x 1.24 m Product no. 103033



2.23 x 3.40 x 1.24 m Product no. 103034



4.46 x 0.85 x 1.24 m Product no. 103042

6.69 x 0.85 x 1.24 m Product no. 103043

8 92 x 0 85 x 1 24 m Product no. 103044

#### Cistern\*

- Frost-resistant installation
- Groundwater-stable
- Can be installed in driveways



2.30 x 1.40 x1.49 m Product no. 103760



2.30 x 1.80 x 1.86 m Product no. 103761



2.30 x 2.10 x 2.05 m Product no. 103762

### Choose a top section and

#### Top section with built-in tank filter and gutter guard

■ Suitable for vertically/horizontally installed flat tanks and cisterns



- with built-in tank
- filter for optimised water cleaning



■ With 20 m gutter guard

Product no. 103104

■ passend für Flachtank liegend und Zisterne



- with built-in tank filter for optimised water cleaning
- With 20 m

gutter guard

(Ø60 cm) ■ With high plastic telescopic dome shaft Height adjustable

(600 - 695 mm)

Driveablecover,

load-bearing up to a

maximum of 3.5 t vehicle

weight, 2.2 t axle load

■ Walkable cover,

With high plastic

Height adjustable (600 - 695 mm)

load-bearing up to

200 kg (Ø 60 cm)

telescopic dome shaft

Product no. 103105

### **Choose system componer**



#### Calmed inlet odour-neutral water thanks to oxygen enrichment Product no. 103211

#### filters

### Top section with built-in filter basket and gutter guard

 Suitable for vertically/horizontally installed flat tanks and cisterns



- Walkable cover, load-bearing up to 200 kg (Ø 60 cm)
- With high plastic telescopic dome shaft
- Height adjustable (600 695 mm)
- With high-quality built-in filter basket
- maximum of four DN 100 inlets
- With 20 m gutter guard

Product no. 103108

■ passend für Flachtank liegend und Zisterne



■ Driveablecover, load-bearing up to a maximum of 3.5 t vehicle weight, 2.2 t axle load (Ø 60 cm)

- With high plastic telescopic dome shaft
- Height adjustable (600 695 mm)



- With high-quality built-in filter basket
- maximum of four DN 100 inlets
- With 20 m gutter guard

Product no. 103109

#### ....



#### Overflow syphon

- Skimmereffect, protection against animals
- PE, connection type DN 100 **Product no. 103201**



# Choose water management option



#### Fully-automated rainwater management system Professional

- Perfect needs-based refilling
- Pump inside the house
- With floating suction filter
- With float switch
- Cover for DN 100 wall duct
- Legally required labels



Floating suction



Cover for wall duct



Legally required labels

Product no. 103153



### Fully-automated rainwater management system Compact

- Drinking water refilling
- Clean water pressure pump inside the tank
- With floating suction unit
- With float switch
- Cover for DN 100 wall duct
- Legally required labels





Floating suction



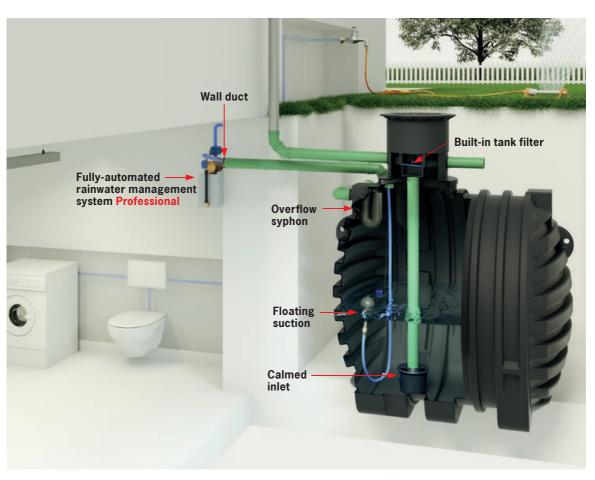
Cover for wall duct

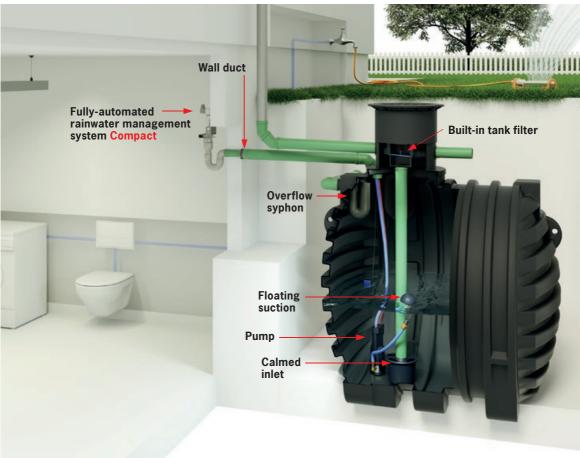


Legally required labels

Clean water pressure pump

Product no. 103152







# ACO Rain4me customised – in five steps

We don't offer a complete system that is perfect for your needs? No problem, simply configure your own Rain4me system with our modular system components. All of the modular components can be combined as required. Wide range of combination options. How to configure your customised rainwater harvesting system:

	Choose	Chosen components
1	Your tank	
2	A top section and filters	
3	Other system components	
4	Water management system	





#### Jet centrifugal pump

The mobile pump Garden Basic is a self-suctioning jet centrifugal pump. It is free-standing. No need to install additional power cables; simply plug the pump into a mains socket whenever it is needed. Another advantage is that the jet centrifugal pump is easy to move from its storage location to where it is needed. It can also be used for other purposes. The pump hose is stored inside the water supply box and is connected with a quick release coupling. The rainwater is withdrawn by a floating suction filter at the level where the water quality is best. Another quick release coupling on the pump allows a garden hose to be connected.

The pump casing is made of cast iron and stainless steel and the pump shaft is also made of stainless steel.

- Weight 7.2 kg
- Height 37 cm
- Operating pressure 3.8 bar
- Maximum pumping height 38 metres
- Output 50 litres per minute

#### Clean water pressure pump

The pump Garden Plus is a clean water pressure pump. As it is a submersible pressure pump, it is suitable for clean water. It is also equipped with integrated dry running protection and an automatic circuit breaker. The pump is installed inside the tank where it can remain all year round. This solution is particularly convenient as you can simply draw water whenever you need it from the water supply box. The rainwater is withdrawn by the floating suction filter that comes with the pump at the level where the water quality is best.

The integrated circuit breaker controls the automatic operation of the pump. If the pressure drops, the pump comes on automatically; when no water flows, the pump is simply switched off again. Dry running protection ensures that the pump does not overheat when the tank is empty.

- Weight 10.5 kg
- Height 45 cm
- Operating pressure 3.6 bar
- Maximum pumping height 36 metres
- Output 95 litres per minute





# Fully-automated rainwater management system Compact

The Compact water management system consists of a clean water pressure pump (see Garden Plus) and is based on drinking water refilling. The clean water pump is installed inside the tank. This solution ensures that no pumping noises can be heard inside the house. The rainwater is withdrawn by a floating suction filter at the level where the water quality is best. The drinking water refilling system is installed inside the house. When rainwater is needed, for example for flushing a toilet, the respective water is supplied via the pump and a pipe system inside the house. When there is no more rainwater in the tank, it is refilled with drinking water . A float switch installed inside the tank measures the water level and sends a signal to the water management system which then automatically feeds drinking water into the tank until the required level is reached. When no rainwater is available, the water management system therefore ensures that the supply points receive enough water at all times.

- Operating pressure 3.6 bar
- Maximum pumping height 36 metres
- Output 95 litres per minute



# Fully-automated rainwatermanagement system Professional

The Professional water management system consists of a centrifugal pump and a fully-automated rainwater management system with needs-based drinking water refilling.

This pump is a self-suctioning centrifugal pump with a circuit breaker and dry running protection. It runs particularly quietly and is therefore ideal for installation in basements or utility rooms to supply toilets, washing machines and garden taps. The pump casing is made of cast iron and stainless steel, the pump shaft is made of stainless steel.

A float switch installed inside the tank measures the filling level and ensures optimum economic drinking water refilling when the tank is empty.

- Weight 10.3 kg
- Length 37 cm
- Operating pressure 3.5 bar
- Output 60 litres per minute



#### Floating suction filter

The floating suction filter consists of a fine filter, a check valve and a float ball. The float ball ensures that the suction point rises and sinks with the water level. This prevents floating and light dirt on the surface of the water and any sedimentation on the base of the tank (sand and heavy particles) from being suctioned in. This not only protects the pump but also guarantees a good water quality. The installed check valve ensures that there is always a water column inside the connected suction hose all the way to the pump, particularly in systems with a suction pump. The pump therefore does not have to build up a new water column whenever it is put into operation.

#### **Rain4me accessories**

Description	Product no.
Plastic cover extension ■ 300 mm (net)	103103
Pneumatic fill level display	103200
Supply pump set	103204
Rubber lip seal DN 100 ■ Borehole 127 mm ■ For use with product no. 103207	103205
Circle hole cutter  for fitting of DN 100 rubber lip seal  Boreholes already pre-cut  only required for additional boreholes	103207
Gutter guard ■ made of plastic ■ 17 x 600 mm lengths (10.2 m) ■ For gutters 90 – 150 mm ■ Should always be fitted!	103209
Leaf filter	103212
Backflow lock Triplex type 2 DN 50  ■ recommended in combination with clean water pressure pump product no. 103152	2105.20.00
Outlet throttle  ■ Throttling can be adjusted (from 0.05 – 0.35 l/s) Additionally required:  □ 1x product no. 103205  □ 1x product no. 103207	103217

### RETENTION

Rainwater retention and retention systems are increasingly growing in importance. These systems aim to retain rainwater and discharge it into the sewage system at a later point in time. This allows flood peaks to be compensated. It takes the strain off the public sewage system, particularly after heavy rain. Public authorities often stipulate that rainwater must be retained, especially in densely populated areas.

Fitting a retention throttle to the ACO Rain4me tanks and cisterns makes them suitable for retaining rainwater. The drainage throttle is installed inside the tank to regulate the rainwater volume that is fed into the public sewage system. A pre-defined volume of rainwater can also be retained on your plot for domestic and garden use.

A retention throttle ensures regular and pre-defined drainage. The throttle's draining speed can be set to between 0.05 to 0.35 litres per second, depending on the requirements. It is installed with the aid of a circle hole cutter and a rubber lip seal on the lower edge of the tank.

The retention throttle's float ball can be screwed to the inside of the dome with the aid of a cord to ensure that the amount of rainwater retained is available for domestic and garden use. Harvesting rainwater can save up to fifty per cent of the drinking water used in an average household.

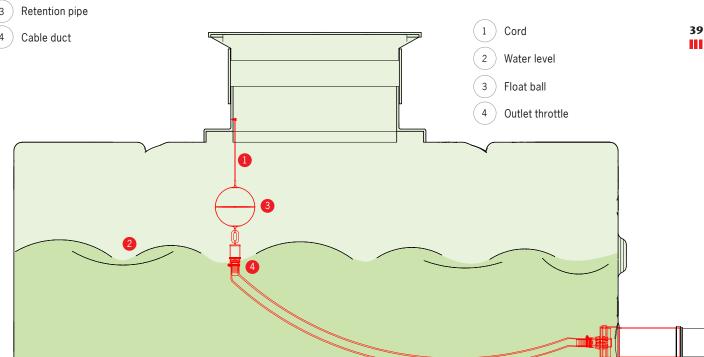


Example design of a 4,000 I rainwater tank used for retention and rainwater storage



Make a hole at the bottom of the tank with the circle hole cutter to connect the retention throttle

- Rainwater inleta
- Overflow
- Retention pipe



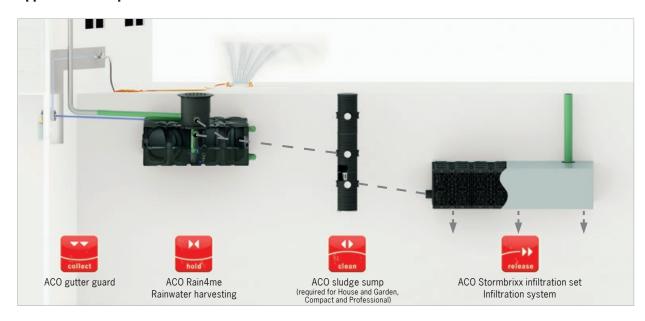
Almost all regions levy rainwater charges these days which all citizens ultimately pay for. Collecting rainwater on your plot and preventing it from being fed into the sewage system can reduce these charges, or even eliminate them completely in some regions.

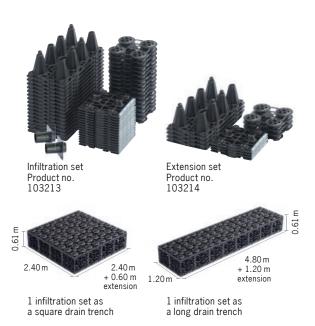
The ACO Stormbrixx infiltration set enables you to allow any rainwater that you do not use in your garden or house to seep into the ground. This also means that you help the natural water cycle:
Rainwater is collected via the roof surface of your house and fed into the
Rain4me tank. When the tank is full, the excess water is fed through the overflow into the ACO infiltration set. From there, it seeps into the ground at a later point in time that depends on the soil conditions and helps to replenish the groundwater.

#### Set contents

- Infiltration set:
  - 16 basic elements
  - 20 side walls
  - 16 covers
  - 2 pipe adapters
- Extension set:
  - 4 basic elements
  - 4 side walls
  - 4 covers

#### **Application example**





### Potential roof surface to be drained with the ACO Stormbrixx infiltration set

	Soil type  Good infiltration properties   Less good infiltration properties						
	Coarse	Medium- grained sand	Fine cand	Silty sand			
Rainfall 150 l/s*ha							
Infiltration set Product no. 103213	300 m <sup>2</sup>	160 m²	130 m²	90 m²			
Infiltration set + extension set Product no. 103213 + 103214	360 m²	200 m²	160 m²	110 m²			
Rainfall 200 l/s*ha							
Infiltration set product no. 103213	250 m²	140 m²	120 m²	80 m²			
Infiltration set + extension set Product no. 103213 + 103214	310 m²	180 m²	150 m²	100 m²			
Rainfall 250 l/s*ha							
Infiltration set product no. 103213	200 m <sup>2</sup>	120 m²	100 m²	70 m²			
Infiltration set + extension set Product no. 103213 + 103214	250 m²	150 m²	120 m²	90 m²			

Please contact your local authority for information about the maximum rainfall and the soil type near your infiltration system.

For larger roof surfaces, please contact the ACO application technology department.



#### **ACO Group**

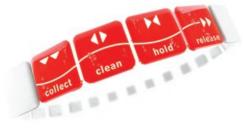
The ACO Group is one of the global market leaders in the drainage technology sector. Climate change challenges us to come up with innovative solutions in response to new environmental influences. ACO adopts an integrated approach and focuses on professional drainage, efficient cleaning and the controlled drainage or reuse of water.

The company's products include drainage channels and outlets, oil and grease separators, backflow systems and pumps and also pressure water tight basement windows and light shafts.

This family company, which is based in Rendsburg/Büdelsdorf, was founded on the grounds of the Carlshütte, the first industrial company in Schleswig-Holstein, in 1946. The ACO Group's innovation capability is the result of intensive research and development and expertise in the processing of polymer concrete, plastic, cast iron, stainless steel and reinforced concrete.

#### ACO at a glance

- 4,800 employees in more than 40 countries (Europe, North and South America, Asia, Australia, Africa)
- 30 production sites in 15 countries
- Sales 2017: 775 million euros





ACO. creating the future of drainage



The ACO Group is headquartered in Rendsburg/Büdelsdorf (Germany)

#### The future of drainage in the building construction sector

With its protective construction elements and drainage systems for private and commercial building construction projects, ACO facilitates modern and sustainable architecture in houses, basements and gardens, thereby making an important contribution to the responsible use of the resource water and to the protection of our environment.



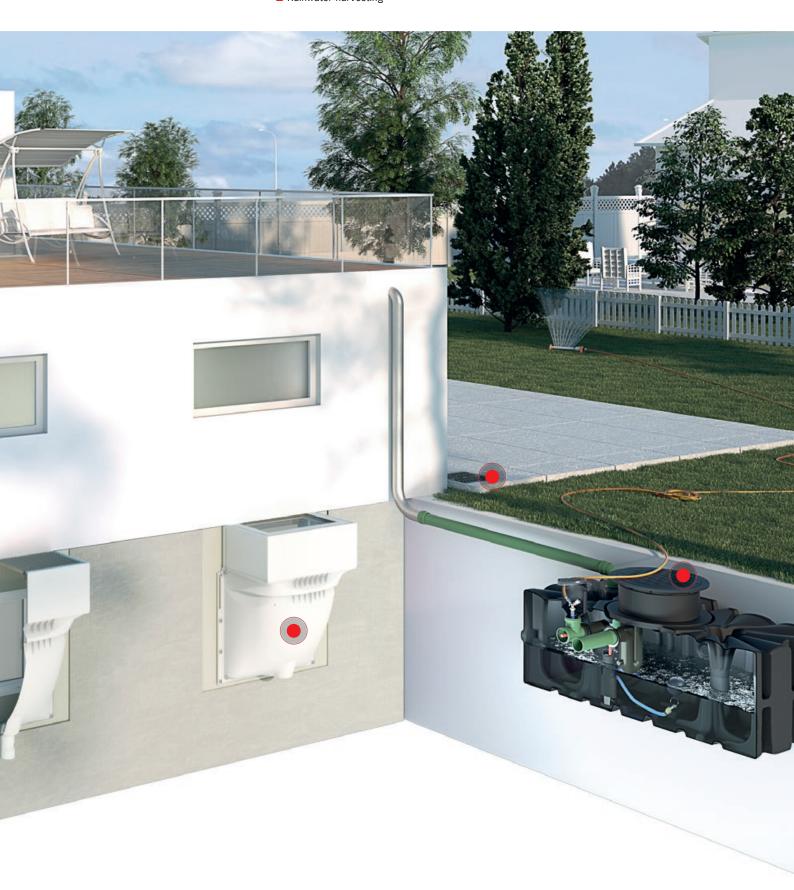
#### System solutions for the basement

- Basement window
- Assembly panels for light wells
- Pressure water proof light wells
- Backflow systems

#### Infrastructure for house and garden

- Bath drainage
- Shaft covers
- Facade drainage channels
- Linear drainage
- Point drainage
- Doormats
- Honeycomb panels and gravel stabilisation
- Infiltration trenches
- Rainwater harvesting









## Each ACO building construction product supports the ACO system chain

#### System solutions for the basement

- Basement window
- Assembly panels for light wells
- Pressure water proof light wells
- Backflow systems

#### Infrastructure for house and garden

- Bath drainage
- Shaft covers
- Facade drainage channels
- Linear drainage
- Point drainage
- Doormats
- Honeycomb panels and gravel stabilisation
- Linear infiltration
- Rainwater harvesting

Barn windows and escape doors